

INTERNATIONAL SEARCH REPORT

International application No
PCT/JP2005/018396

A CLASSIFICATION OF SUBJECT MATTER		
Int Cl H01L21/3205 (2006 01), H01L21/768 (2006 01), H01L21/822 (2006 01), H01L21/8234 (2006 01), H01L23/52 (2006 01), H01L23/522 (2006 01), H01L27/04 (2006 01), H01L27/06 (2006 01)		
According to International Patent Classification (IPC) or to both national classification and IPC		
B FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
IntCl H01L 21/3205, H01L 21/768, H01L 21/822, H01L 21/8234, H01L 23/52, H01L 23/522, H01L 27/04, H01L 27/06		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
<p>Published examined utility model applications of Japan 1922-1996</p> <p>Published unexamined utility model applications of Japan 1971 2005</p> <p>Registered utility model specifications of Japan 1996 2005</p> <p>Published registered utility model applications of Japan 1994 2005</p>		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
C DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication where appropriate, of the relevant passages	Relevant to claim No
Y	EP 1310998 A2 (Ricoh Company, Ltd.) 2003.05.14, [0036] - [0138] , Figs. 2-14 & JP 2003-152100 A , [0033] - [0111] , Figs. 1-13	1-12
Y	JP 9-17860 A (Sony Corporation) 1997.01.17, [0002] - [0024] , Figs. 1-2 (Family: none)	1-12
Y	JP 2000-340562 A (Hitachi, Ltd.) 2000 .12 .08 , [0014] - [0017] , Fig . 2 (Family : none)	1-12
Y	JP 2004-146548 A (Ricoh Company, Ltd.) 2004 .05 .20 , Claims 1, 5-6, [0020] - [0028] , Figs . 1, 9-10 (Family : none)	8-10
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C <input type="checkbox"/> See patent family annex		
<p>* Special categories of cited documents</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier application or patent but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</p> <p>"Y" document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art</p> <p>"&" document member of the same patent family</p>		
Date of the actual completion of the international search 26.12.2005		Date of mailing of the international search report 17.01.2006
Name and mailing address of the ISA/JP Japan Patent Office 3-4-3, Kasumogaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Authorized officer TOMOKAZU HAYAKAWA Telephone No +81-3-3581-1 101 Ext. 3462